

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Implementation of Section 6002(b) of the	)	WT Docket No. 13-135
Omnibus Budget Reconciliation Act of 1993	)	
	)	
Annual Report and Analysis of Competitive	)	
Market Conditions With Respect to Mobile	)	
Wireless, Including Commercial Mobile	)	
Services	)	

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**COMMENTS OF AT&T, INC.**

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AT&T, Inc. respectfully submits these comments on behalf of itself and its wireless affiliates (collectively, “AT&T”) pursuant to the *Public Notice* released on May 17, 2013 in the above-captioned proceeding.<sup>1</sup>

## INTRODUCTION AND SUMMARY

On March 21, 2013, the Commission released its Sixteenth Wireless Competition Report (“*Sixteenth Report*”).<sup>2</sup> The *Sixteenth Report* was filled with extensive data unequivocally demonstrating that the wireless mobile marketplace is not only “effectively” but intensely competitive. Innovation and investment continued to skyrocket, even as the economy struggled to pull itself out of recession; consumer choices remained robust, not only among service providers, but also among handsets and service plans; and consumers are getting more “bang for their buck” than ever before as unit prices continue to fall. Although the Commission declined explicitly to address whether this evidence shows that there is effective competition, that evidence is overwhelming and speaks for itself. As Commissioner Pai observed, “the answer is pretty obvious . . . Yes, there is effective competition. That’s what the Wireless Telecommunications Bureau basically found last week when it approved the combination of the fourth and fifth largest providers in America without seeking a vote by the full Commission. And that’s what every consumer sees when he or she goes shopping for a new phone – choice and competition are ubiquitous.”<sup>3</sup>

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<sup>1</sup> Public Notice, *Wireless Telecommunications Bureau Seeks Comment on the State of Mobile Wireless Competition*, WT Docket No. 13-135, DA 13-1139 (rel. May 17, 2013) (“Notice”).

<sup>2</sup> Sixteenth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services*, 28 FCC Rcd. 3700 *Sixteenth Report*, FCC 13-34 (rel. March 21, 2013) (“*Sixteenth Report*”).

<sup>3</sup> *Sixteenth Report*, Statement of Commissioner Ajit Pai, Approving in Part, Concurring in Part.

Developments since the time period covered by the *Sixteenth Report* have only made the marketplace more competitive. The U.S. wireless industry structure all but guarantees intense competition – there are four nationwide facilities-based providers and more than one hundred smaller regional facilities-based providers. DISH Network Corporation (“DISH”) is poised to enter as a fifth national competitor and Sprint and T-Mobile have either completed or are engaged in transactions that, when consummated, will make them stronger competitors. This intense competition has driven the industry to set a new record for broadband investment, as providers large and small spend billions of dollars to upgrade their networks to LTE and improve their services as quickly as possible. Subscribership is at an all-time high, output continues to increase dramatically, real per-unit prices continue to fall, and consumers are receiving much more for every dollar they spend and face no significant barriers to changing providers when they wish to do so. These marketplace facts lead to only one possible conclusion: the wireless marketplace is effectively competitive.

Going forward, the Commission should focus its energies on addressing the only real threat to the United States’ wireless leadership – the looming spectrum crisis. The Commission’s top priority therefore should be moving forward on the incentive auction proceeding, and ensuring that the auction framework is fair and designed to encourage full participation at auction by all carriers. Recent claims that the Commission should limit the participation of AT&T and Verizon have no basis in marketplace realities; there is no realistic threat of market foreclosure, and measures to limit participation would only reduce the revenues obtained from the forward auction and thereby reduce the amount of spectrum made available to the industry (and risk causing the auction to fail altogether).

## ARGUMENT

### I. THE WIRELESS MOBILE MARKETPLACE IS CHARACTERIZED BY ROBUST COMPETITION.

Consistent with the framework the Commission has used in the last several competition reports, the Notice asks commenters to submit updated data on industry structure, provider conduct, market performance, and consumer behavior. The Commission also seeks comment on broader aspects of the mobile “ecosystem,” such as operating systems, equipment, spectrum markets, applications and backhaul.<sup>4</sup> Once again, the evidence overwhelmingly demonstrates that the wireless marketplace is fully open to effective competition. Indeed, each of these measures strongly supports a finding of effective competition, and recent developments in 2013 have only intensified that competition.

#### A. Market Structure.

Both the *Sixteenth Report* and subsequent developments reaffirm that the industry structure of the wireless marketplace is fundamentally open and competitive. Indeed, as explained below, the industry is becoming even more competitive with the imminent entry of DISH as a major new competitor and recently completed or in-progress transactions that, according to the Commission and the parties, will continue substantially to strengthen Sprint and T-Mobile as competitors.<sup>5</sup>

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<sup>4</sup> Notice at 14-16.

<sup>5</sup> Memorandum Opinion and Order and Declaratory Ruling, *Applications of Deutsche Telekom AG, T-Mobile USA, Inc., and MetroPCS Communications, Inc. For Consent To Transfer of Control of Licenses and Authorizations*, WT Docket No. 12-301, DA 13-384, ¶ 2 (rel. March 12, 2013) (“T-Mobile/MetroPCS Order”) (the public interest benefits of the T-Mobile/MetroPCS transaction “include the facilitation of Long Term Evolution (“LTE”) deployment, the expansion of the MetroPCS brand into new geographical markets, the development of a more robust, national network, improved quality of service, and the strengthening of the fourth largest nationwide service provider’s ability to compete in the mobile broadband services market”); Public Interest Statement, *Applications of Sprint Nextel Corporation, Transferor, and SoftBank*

As the Commission has previously acknowledged, the United States has historically been the least concentrated of the 26 major industrialized countries followed, and an April 2013 recent study confirms that the U.S. continues to lead the world in this regard.<sup>6</sup> There are today four strong national wireless providers and dozens of regional and local providers.<sup>7</sup> The vast majority of these wireless providers offer national coverage, using a combination of their own facilities and roaming arrangements.<sup>8</sup> Most Americans, even in rural areas, have many competitive choices: 97 percent of U.S. customers can choose among at least three wireless voice competitors, 93 percent can choose among at least four wireless voice competitors, and 80 percent of U.S. consumers can choose among at least five voice competitors.<sup>9</sup> Equally important, Americans have more choices than ever for wireless *broadband* services. The Commission estimated that “the percentage of the population covered by at least three mobile

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*Corp. and Starburst II, Inc., Transferees, for Consent to Transfer of Control of Licenses and Authorizations*, IB Docket No. 12-343, at 2 (November 12, 2012) (“Sprint/SoftBank Public Interest Statement”) (“The scale of SoftBank’s direct infusion of capital into Sprint reflects SoftBank’s strong commitment to the U.S. market. This new capital can be used to strengthen Sprint’s operations in every way, creating a stronger competitor and benefitting consumers. SoftBank’s investment, in and of itself, is a significant public interest benefit of the proposed transaction, as it will strengthen Sprint’s balance sheet and make possible increased investment in its network and wireless broadband services, directly benefiting Sprint’s customers.”).

<sup>6</sup> Fourteenth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, 25 FCC Rcd. 11407 ¶ 365, Table 41 (rel. May 20, 2010) (“*Fourteenth Report*”); CTIA Slide Presentation, *Mobile Wireless Competition in the U.S.*, at 5 (May 6, 2010) (attached to *Ex Parte* Letter from Christopher Guttman-McCabe (CTIA) to Marlene H. Dortch (FCC), GN Docket No. 09-157 (May 7, 2010)) (“CTIA May 2010 Wireless Market Statistics”); Glen Campbell, Global Wireless Matrix 1Q13, Bank of America and Merrill Lynch, Chart 41 (April 15, 2013) (showing that, even accounting for only the top five competitors in the U.S., by the end of 2012, the U.S. still continued to have the lowest HHI (0.242) compared to other developed countries with the exception of the U.K. (0.220), India (0.178), and Pakistan (0.223)).

<sup>7</sup> *Sixteenth Report* ¶ 26.

<sup>8</sup> *Id.* ¶¶ 26-28.

<sup>9</sup> *Id.* ¶ 44, Table 5.

broadband providers increased from 82 percent in August 2010 to 87 percent in April 2011 to nearly 92 percent in October 2012,” and that “in October 2012, 82 percent of the U.S. population lived in areas with coverage by at least four mobile broadband providers, up from 68 percent in August 2010.”<sup>10</sup>

The market structure is only becoming more conducive to competition, as new facilities-based entry continues to occur, and existing providers become even stronger. One of the most notable new entrants is DISH, which has historically been a provider of satellite television services. In 2011, DISH acquired two mobile satellite companies out of bankruptcy, and in December, 2012, the Commission granted DISH authority to use this spectrum as 40 MHz of cleared, paired mobile broadband spectrum (now known as the AWS-4 band).<sup>11</sup> Combining its AWS 4 spectrum with its existing 700 MHz E Block spectrum, DISH is poised to become another national provider of mobile broadband services. DISH has confirmed that it “will aggressively build out a broadband network to provide competitive choice and innovative offerings to American consumers,” and indeed, the Commission’s rules *require* DISH to deploy service to at least 40 percent of the U.S. population by 2017.<sup>12</sup>

At the same time, two other national providers – T-Mobile and Sprint – have taken steps to strengthen their competitive positions. Over the last few years, T-Mobile has substantially increased its spectrum portfolio, allowing it to significantly improve and expand its mobile network so that it can compete more effectively for mobile broadband customers. In 2011, T-

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<sup>10</sup> *Id.* ¶ 48 & Table 8.

<sup>11</sup> See Report and Order and Order of Proposed Modification, *Service Rules for Advanced Wireless Services in 2000-2020 MHz and 2180-2200 MHz Bands*, 27 FCC Rcd. 16102 (rel. Dec. 17, 2012) (“AWS-4 Order”).

<sup>12</sup> Comments of DISH Network Corporation, *Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, at 18 (May 17, 2012); AWS-4 Order ¶ 20.

Mobile acquired substantial AWS spectrum from AT&T, and in 2012 it purchased even more spectrum from Verizon. And most recently, T-Mobile acquired MetroPCS and all of its spectrum and network assets. In short, as T-Mobile explained in a recent investor presentation, it has added 15 MHz of AWS spectrum and 5 MHz of PCS spectrum in its top 100 markets, allowing it to deploy 20x20 MHz LTE in 90 percent of the top 25 U.S. markets.<sup>13</sup> Moreover, as a result of the T-Mobile/MetroPCS transaction, T-Mobile expects to realize substantial additional economies of scale and scope – projected to be worth “\$6-7Bn” – that would make it a significantly more formidable competitor.<sup>14</sup> Indeed, the Commission has already conducted a competitive analysis, and has found that T-Mobile’s recent transaction with MetroPCS “will enhance [T-Mobile’s ability] to compete against the top three nationwide service providers.”<sup>15</sup>

Sprint too has been implementing measures to make it a stronger national competitor. A few years ago, Sprint implemented its “Network Vision” strategy to upgrade and better align its network resources to compete more effectively for mobile broadband customers. Sprint recently reported that it is exceeding its targets, and that it has been highly successful in developing more effective competitive offerings while lowering its own costs.<sup>16</sup> These efforts have opened the door to further substantial financing and potential synergies going forward, as evidenced by SoftBank’s willingness to invest billions of dollars to work with Sprint to further enhance its competitive position in the U.S. As Sprint recently explained, its transaction with SoftBank is

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<sup>13</sup> T-Mobile and MetroPCS, *Creating the Value Leader in Wireless*, at 15 (Oct. 3, 2012), <http://investor.t-mobile.com/phoenix.zhtml?c=177745&p=irol-presentations>.

<sup>14</sup> *Id.*

<sup>15</sup> T-Mobile/MetroPCS Order, ¶ 100.

<sup>16</sup> Sprint, 1Q13 Earnings Conference Call, (Apr. 24, 2013), <http://investors.sprint.com/Cache/1500048800.PDF?Y=&O=PDF&D=&fid=1500048800&T=&iid=4057219>.



expected “to strengthen Sprint’s operations in every way, creating a stronger competitor and benefitting consumers.”<sup>17</sup>

And then there is the Clearwire spectrum. Sprint owns 51 percent of Clearwire and effectively controls Clearwire, which holds more spectrum on a nationwide basis than any other provider in the U.S. by a wide margin. Clearwire is using that spectrum to become another national LTE competitor, and to provide services both at the wholesale and retail levels. Clearwire has explained that “[w]ith 160MHz of wireless spectrum on average in some of the largest markets in the United States, Clearwire will be able to deliver more capacity to high-density, high-demand markets than other wireless networks.”<sup>18</sup> According to Clearwire’s Chief Technology Officer, Clearwire’s “LTE Advanced-ready network design, which leverages our deep spectrum with wide channels, can achieve greater speeds and capacity than other networks” and “Clearwire is the only carrier with the unencumbered spectrum portfolio required to achieve this level of speed and capacity in the United States.”<sup>19</sup> Clearwire has stated that “[i]n addition, the 2.5 GHz spectrum band” that it has chosen “has rapidly become a common configuration worldwide for 4G deployments, creating a potentially robust, cost-effective and global ecosystem that could serve billions of devices.”<sup>20</sup> As a result, Clearwire anticipates “that the economies of scale derived from this global ecosystem will act as a catalyst for the development of thousands of low-cost devices and applications.”<sup>21</sup>

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<sup>17</sup> Sprint/SoftBank Public Interest Statement, at 2.

<sup>18</sup> *Clearwire’s 4G LTE Network*, Clearwire, <http://www.clearwire.com/company/featured-story>.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

Although matters are still in flux, it is quite clear that Clearwire's vast expanse of spectrum will be used to provide additional competitive alternatives. As the Commission is aware, Sprint and DISH are engaged in a bidding war to acquire Clearwire, and Clearwire's spectrum assets and capabilities will substantially strengthen whichever competitor wins the bidding war. But even if Clearwire were to become independent, it would still be a strong national competitor in its own right, both as a wholesale and retail provider.

Finally, other regulatory and marketplace changes have reduced the barriers and costs of entry and expansion by, in effect, reducing the costs of inputs such as cell towers and backhaul. For example, the Commission's "shot clock" order was recently upheld by the Supreme Court,<sup>22</sup> which reduces to some degree the barriers posed by the local zoning process to the deployment of new cell towers. In that regard, CTIA reports that there were more than 300,000 cell sites operating in the United States as of the end of 2012, a new record.<sup>23</sup> Similarly, the wide availability of Ethernet from multiple providers is revolutionizing the backhaul marketplace. Many wireless providers, including Sprint and T-Mobile, have largely replaced their legacy copper backhaul facilities with Ethernet and high capacity microwave, dramatically lowering their backhaul costs and helping to facilitate their advanced broadband deployments.

## **B. Provider Conduct**

Provider conduct also confirms that the wireless marketplace is robustly competitive. The *Sixteenth Report* documents extensive price and non-price rivalry in 2012 amongst wireless

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<sup>22</sup> *City of Arlington v. FCC*, 133 S. Ct. 1863 (2013).

<sup>23</sup> CTIA – The Wireless Association, *Semi-Annual Wireless Industry Survey Year End 2012*, at 11 (May 2, 2013), available at [http://files.ctia.org/pdf/CTIA\\_Survey\\_YE\\_2012\\_Graphics-FINAL.pdf](http://files.ctia.org/pdf/CTIA_Survey_YE_2012_Graphics-FINAL.pdf) ("CTIA Wireless Industry Survey Year-End 2012 Results").

competitors,<sup>24</sup> and that rivalry has only intensified in 2013 as providers continue to deploy extensive LTE networks and introduce innovative pricing plans and packages.

*Non-Price Rivalry.* National and regional provider in the U.S. are investing billions of dollars to deploy advanced LTE networks and to extend the coverage of their broadband services. Indeed, “U.S. wireless providers increased their annual network investments from \$25.3 billion in 2011 to \$30.1 billion in 2012 (up 19 percent).”<sup>25</sup> That \$30 billion of investment is a truly extraordinary figure, because it represents “25 percent of the world’s total wireless capital expenditures, even though the U.S. has only five percent of the world’s wireless users.”<sup>26</sup>

As of April 2013, AT&T had built out LTE to over 200 million people, and expects to reach 90 percent of its planned 300 million POP LTE deployment by the end of 2013.<sup>27</sup> Verizon Wireless has likewise deployed LTE to cover 287 million POPs, largely overlaying its 3G, EV-DO mobile broadband network in the process, and Verizon has already migrated 54 percent of its data traffic to its LTE network.<sup>28</sup>

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<sup>24</sup> See generally *Sixteenth Report* ¶¶ 136-241.

<sup>25</sup> CTIA, Press Release, CTIA – The Wireless Association® Semi-Annual Survey Shows U.S. Wireless Providers Invested Almost Six Times More Per Subscriber than Rest of World (May 2, 2013), available at <http://www.ctia.org/media/press/body.cfm/prid/2261> (“CTIA May 2, 2013 Press Release”).

<sup>26</sup> *Id.*

<sup>27</sup> AT&T Inc., Press Release, Solid Earnings Per Share and Cash Flows, Strong Mobile Data Growth and Record U-verse Broadband Gains Highlight AT&T’s First-Quarter Results (Apr. 23, 2013), <http://www.att.com/gen/press-room?pid=24091&cdvn=news&newsarticleid=36339&mapcode=corporate|financial>.

<sup>28</sup> See Verizon, 1<sup>st</sup> Quarter 2013 Earnings Results, at 8 (Apr. 18, 2013), [http://www22.verizon.com/investor/DocServlet?doc=vz\\_2013\\_q1\\_presentation.pdf](http://www22.verizon.com/investor/DocServlet?doc=vz_2013_q1_presentation.pdf).

T-Mobile says that it offers national coverage with its HSPA+ network and roaming arrangements,<sup>29</sup> but it is now making substantial investments to upgrade to LTE. For the first quarter of 2013 alone, T-Mobile invested “\$1.1 billion, in support of an accelerating network modernization program,”<sup>30</sup> and its “LTE network is now live in seven markets on its 1700 MHz AWS spectrum, including Baltimore; Houston; Kansas City; Las Vegas; Phoenix; San Jose, Calif.; and Washington, D.C.,” with New York coming online this summer.<sup>31</sup> T-Mobile states that it “plans to cover 100 million POPs with LTE by mid-2013 and 200 million by year-end.”<sup>32</sup> T-Mobile has explained that as a result of its acquisition of “MetroPCS, T-Mobile will be able to deploy 2X20 MHz LTE in 90 percent of the top 25 U.S. markets.”<sup>33</sup> In addition, T-Mobile claims to be the first carrier to deploy “HD Voice” calls over its wireless network.<sup>34</sup> And, T-Mobile contends that it “will be able to move to LTE Advanced faster than its larger rivals because its network equipment and Radio Access Network are already capable of supporting LTE Advanced.”<sup>35</sup>

Sprint is likewise investing to deploy and expand its LTE network. As part of Sprint’s “Network Vision” program, it has already upgraded and modernized about half its cell sites, and

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<sup>29</sup> T-Mobile, Press Release, T-Mobile USA Reports First Quarter 2013 Results (Mar. 8, 2013), *available at* <http://investor.t-mobile.com/phoenix.zhtml?c=177745&p=irol-IRHome> (“T-Mobile USA 2013 First Quarter Results”).

<sup>30</sup> *Id.*

<sup>31</sup> Phil Goldstein, *T-Mobile boasts of lead in LTE Advanced*, FierceWireless, Apr. 23, 2013, *available at* <http://www.fiercewireless.com/story/t-mobile-boasts-lead-lte-advanced/2013-04-23> (“FierceWireless Apr. 23, 2013”).

<sup>32</sup> *Id.*; T-Mobile USA 2013 First Quarter Results.

<sup>33</sup> FierceWireless Apr. 23, 2013.

<sup>34</sup> *See* T-Mobile, *Coverage*, [http://t-mobile-coverage.t-mobile.com/?cm\\_mmc\\_o=VzbpjmwzygtCjC-czywEwllCjCVzbpjmwzygtCjCVzbpjmwzygt](http://t-mobile-coverage.t-mobile.com/?cm_mmc_o=VzbpjmwzygtCjC-czywEwllCjCVzbpjmwzygtCjCVzbpjmwzygt).

<sup>35</sup> FierceWireless Apr. 23, 2013.

reports being ahead of schedule.<sup>36</sup> To date, Sprint has launched LTE in “88 cities . . . with more than 170 to launch in the coming months.”<sup>37</sup> Sprint “expects to cover 200 million POPs with LTE by the end of 2013.”<sup>38</sup> Sprint is also on track to shut down the Nextel platform, and expects to begin deployment of LTE on 800 MHz spectrum in the fourth quarter of 2013.<sup>39</sup>

Many regional carriers have also been making large investments to deploy LTE in their service areas. For example, “C Spire introduced 4G LTE services last year as part of a multi-million dollar investment . . . in 37 Mississippi markets.”<sup>40</sup> C Spire recently announced “plans to continue the roll out of 4G LTE mobile broadband services beginning in August to new areas . . . across the state.”<sup>41</sup> “When completed in November,” 4G LTE service will be available to “nearly six out of every 10 consumers and businesses in the state [of Mississippi].”<sup>42</sup> In addition, C Spire “plans to extend 4G LTE services in 21 cities and 6 counties in south Alabama and along the Florida panhandle by the end of the year.”<sup>43</sup> Similarly, as of February 2013, U.S.

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<sup>36</sup> Phil Goldstein, *Sprint loses 337,000 net subs, lowers LTE coverage goal to 200M by year-end*, FierceWireless, Feb. 7, 2013, available at <http://www.fiercewireless.com/story/sprint-loses-337000-net-subs-lowers-lte-coverage-goal-200m-year-end/2013-02-07> (“FierceWireless Feb. 7, 2013”).

<sup>37</sup> Sprint, 1Q13 Earnings Conference Call, at 13 (Apr. 24, 2013), <http://investors.sprint.com/Cache/1500048800.PDF?Y=&O=PDF&D=&fid=1500048800&T=&iid=4057219> (“Sprint First Quarter 2013 Earnings Call”).

<sup>38</sup> FierceWireless Feb. 7, 2013.

<sup>39</sup> Sprint First Quarter 2013 Earnings Call at 14.

<sup>40</sup> C Spire Wireless, Press Release, C Spire Wireless to Expand 4G LTE Service In Mississippi This Summer (May 24, 2013), [http://www.cspire.com/company\\_info/about/news\\_detail.jsp?entryId=16600022](http://www.cspire.com/company_info/about/news_detail.jsp?entryId=16600022).

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

Cellular had deployed LTE to 61 percent of its customers,<sup>44</sup> and it has stated that it will bring “4G LTE access to 87 percent of customers in 2013.”<sup>45</sup>

The industry is also developing new approaches to facilitate LTE roaming arrangements. For example, the Competitive Carrier Associations (“CCA”), formerly the Rural Cellular Association (“RCA”), recently issued an RFP “for organizations interested in hosting the Data Services Hub, and TNS was selected.”<sup>46</sup> “The TNS Data Services Hub . . . will provide participating operators the opportunity to connect for services including 4G LTE roaming, Wi-Fi access and interoperability with requisite 3G roaming fallback.”<sup>47</sup> “The TNS Data Services Hub will provide a technical and business framework for simplifying LTE and other next generation data connectivity and roaming needs among participating operators.”<sup>48</sup> “[T]he solution will provide value to competitive carriers by enabling them to work more easily with one another to expand their national footprints.”<sup>49</sup> Importantly, CCA members include Sprint, T-Mobile, and Clearwire.<sup>50</sup> Sprint’s CEO has noted that Sprint “recently conducted . . . LTE roaming trials with C Spire, and that it was working with other operators on similar trials.”<sup>51</sup>

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<sup>44</sup> Phil Goldstein, *U.S. Cellular: Average LTE downlink speeds are 3-6 Mbps*, FierceWireless, Feb. 15, 2013, available at <http://www.fiercewireless.com/story/us-cellular-average-lte-downlink-speeds-are-3-6-mbps/2013-02-15>.

<sup>45</sup> U.S. Cellular, Annual Meeting of Shareholders, Presentation of Mary N. Dillon, President and CEO, at 6 (May 14, 2013), <http://phx.corporate-ir.net/phoenix.zhtml?c=106793&p=irol-IRHome>.

<sup>46</sup> Transaction Network Services, Press Release, TNS Delivers Next Generation Data Services Hub Including LTE Roaming Solutions for CCA Members (Mar. 12, 2013), available at <http://www.tnsi.com/news/2013/mar/12/tns-delivers-next-generation-data-services-hub-including-lte-roaming-solutions-for-cca-members>.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> Tammy Parker, *CCA members get their own LTE data roaming hub*, FierceBroadbandWireless, Mar. 14, 2013, available at

As a result of this vigorous rivalry, the United States leads the world in LTE deployment and providing LTE options for consumers. As former Chairman Genachowski recently recognized, the U.S. “lead[s] the world in deploying the next generation of wireless broadband networks – 4G LTE – at scale.”<sup>52</sup> As of June 3, 2013, 4G Americas reported that there were at least 40 facilities-based U.S. mobile providers that have already deployed LTE, or that are in LTE trials or that have plans to deploy LTE services, more than in any other country by a wide margin.<sup>53</sup> As a result of this intense competition, the average mobile broadband speeds in North America are about eight times higher than in Asia, nearly five times higher than Central and Eastern Europe, and nearly double that of Western Europe.<sup>54</sup>

*Price Rivalry.* Pricing competition in the wireless marketplace also remains intense, and providers continue to compete with innovative pricing plans. For example, several providers introduced “data sharing” plans for post-paid services within the last year that permit customers to share their data allotments with family members and among multiple devices, thus eliminating the need for customers to purchase multiple data plans. These data plans can result in significant

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<http://www.fiercebroadbandwireless.com/story/cca-members-get-their-own-lte-data-roaming-hub/2013-03-14>.

<sup>51</sup> See Dan Meyer, *CCA Spring 2013: Sprint Nextel moves to enable LTE roaming*, RCRWireless, Apr. 18, 2013, available at <http://www.rcrwireless.com/article/20130418/carriers/cca-spring-2013-sprint-nextel-moves-enable-lte-roaming>.

<sup>52</sup> Remarks of FCC Chairman Julius Genachowski, “Winning the Global Bandwidth Race: Opportunities and Challenges for the U.S. Broadband Economy,” at Vox Media Headquarters, Washington, D.C., at 2 (Sept. 25, 2012), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-316462A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-316462A1.pdf).

<sup>53</sup> See 4G Americas, *4G Americas Global Deployments Status Update 7 June 2013* (June 7, 2013), <http://www.4gamericas.org/UserFiles/file/Global%20Status%20Updates/Global%20Deployments%207%20June%202013.pdf>.

<sup>54</sup> Navigant Economics, *Mobile Wireless Performance in the EU & the US*, at 13 (May 2013), available at [http://www.gsmamobilewirelessperformance.com/GSMA\\_Mobile\\_Wireless\\_Performance\\_May2013.pdf](http://www.gsmamobilewirelessperformance.com/GSMA_Mobile_Wireless_Performance_May2013.pdf) (“Navigant Wireless Performance Report”).

price reductions, particularly for heavy users of mobile data services.<sup>55</sup> And, at least for AT&T, customers still have the option of purchasing service under the pre-existing plans.

Other post-paid mobile service providers have also introduced new pricing strategies to compete for customers. Earlier this year, T-Mobile launched its “un-carrier” pricing structure that it claims “provid[es] customers with the lowest out-of-pocket costs on some of the most popular devices available in the U.S. wireless industry.”<sup>56</sup> Under T-Mobile’s approach, phone subsidy payments are separated from the service fees, and customers who have paid off their subsidy, can obtain service from T-Mobile at lower prices. For its part, Sprint is aggressively touting its “truly unlimited data” plans that offer customers unlimited voice, messaging and data for \$79.99 per month.<sup>57</sup> And more recently, providers have been offering to significantly reduce up front device costs by buying back older devices at high prices.<sup>58</sup>

Pricing competition among pre-paid providers is likewise intense.<sup>59</sup> In a recent campaign, Virgin Mobile – a subsidiary of Sprint – offered a \$100 credit to T-Mobile customers who switch to Virgin Mobile.<sup>60</sup> AT&T also recently enhanced its prepaid “GoPhone” wireless plans and devices. GoPhone users can now use AT&T’s 4G or 4G LTE network, and new

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<sup>55</sup> See, e.g., Bonnie Cha, *Crunching the Numbers on Verizon’s and AT&T’s Shared-Data Plans*, All Things D, July 18, 2012, available at <http://allthingsd.com/20120718/crunching-the-numbers-on-verizon-and-atts-shared-data-plans>.

<sup>56</sup> T-Mobile, Press Release, *T-Mobile USA Reports First Quarter 2013 Results* (Mar. 8, 2013), available at <http://investor.t-mobile.com/phoenix.zhtml?c=177745&p=irol-newsArticle&ID=1816782&highlight=>.

<sup>57</sup> See Sprint, “Don’t accept limits and have a data dilemma,” <http://www.sprint.com/landings/competition>.

<sup>58</sup> See, e.g., *id.*

<sup>59</sup> Devin Coldewey, *Virgin Mobile offers \$100 to T-Mobile switchers as prepaid market heats up*, NBC News Technology, Apr. 8, 2013, <http://www.nbcnews.com/technology/virgin-mobile-offers-100-t-mobile-switchers-prepaid-market-heats-1C9268994> (“the prepaid market is getting more competitive by the day”).

<sup>60</sup> *Id.*



pricing plans the give AT&T customers “even more value and data at an attractive price.”<sup>61</sup> Similarly, Verizon “recently increased the amount of data to prepaid customers on its 3G network in a bid to drive prepaid 3G data sales.”<sup>62</sup>

Sprint and T-Mobile have continued to target prepaid customers. Sprint’s subsidiary Boost offers a “shrinking payment” option, which reduces customers’ monthly bills by \$5 for every six on-time payments (up to a maximum of a \$15 reduction). T-Mobile has introduced its “Simple Choice Plan” for prepaid customers, which offers unlimited talk and text, and customers choose only the amount of high-speed data they want in their plan, all at prices that appear to be below T-Mobile’s prior offerings. Independent MVNOs are also aggressively competing with lower priced offerings. One new entrant, called “Ting,”<sup>63</sup> permits customers to choose from among a variety of minutes, text, and data plans that can be shared among devices, and if customers use less than their plan allotment, they are automatically refunded the difference between that plan and the next lower plan.<sup>64</sup>

### **C. Marketplace Performance**

As the Commission has explained, “[t]he structural and behavioral characteristics of a competitive market are desirable not as an ends in themselves, but rather as a means of bringing

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<sup>61</sup> AT&T Press Release, AT&T GoPhone Customers Can Surf the Nation’s Fastest 4G LTE Network with Prepaid Plans (June 14, 2013), <http://www.att.com/gen/press-room?pid=24397&cdvn=news&newsarticleid=36623>.

<sup>62</sup> Phil Goldstein, AT&T drops price, adds LTE data to GoPhone smartphone plans (June 14, 2013), *available at* <http://www.fiercewireless.com/story/att-drops-price-adds-lte-data-gophone-smartphone-plans/2013-06-14>.

<sup>63</sup> See Ting, *Devices*, <https://ting.com/devices/buy>. Ting offers national mobile broadband services using Sprint’s network.

<sup>64</sup> Mike Dano, *MVNO Ting to reach breakeven in Q4; 40-50% of new customers are BYOD*, FierceWireless, May 23, 2013, *available at* <http://www.fiercewireless.com/story/mvno-ting-reach-breakeven-q4-40-50-new-customers-are-byod/2013-05-23>. The opposite occurs if customers exceed their allotment.

tangible benefits to consumers . . .”<sup>65</sup> Accordingly, the Commission has always examined traditional market performance issues, including trends in pricing, penetration, output, investment, innovation, and quality of service. These metrics continue to demonstrate that the wireless marketplace is effectively competitive. Output continues to expand dramatically, prices continue to decline, penetration is high among all demographics, investment continues to be extremely high (which is particularly notable given the recession), innovation continues at breakneck speed, and quality of service is at record levels.

The per-unit prices customers pay for mobile broadband service have continued to fall. Indeed, consumers today are getting better and faster services at the same or lower prices: according to the latest survey data from CTIA, customers used more than 69 percent more data in 2012 than in 2011 (1.468 trillion MB, compared to 867 billion MB) even as their monthly cost of service remained stable.<sup>66</sup> Consumers are benefitting from faster data speeds as carriers upgrade their networks to LTE, greater coverage as carriers expand their networks, and greater reliability as carriers increase their network capacity. Cisco estimates that mobile customers on 4G connections (like LTE) generate 19 times more traffic than those on non-4G connections.<sup>67</sup> Moreover, the average smartphone user consumed 81 percent more data each month in 2012 than

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<sup>65</sup> *Fourteenth Report* ¶ 153.

<sup>66</sup> CTIA Wireless Industry Survey Year-End 2012 Results at 2, 9 (average revenue per customer increased from \$46.11 in 2011 to \$48.73 in 2012, and has remained stable around \$48 for several years). In this regard, it is important to note that although ARPU data can be a useful metric, it is neither a measure of price nor quantity but is a function of both, and therefore must be properly examined in context. Where, as is the case in the wireless industry, a growing proportion of a provider’s customers are purchasing more data services, ARPU may increase even if the per unit prices have all declined. Indeed, we should expect to see this phenomenon as smartphone penetration continues to increase and a greater proportion of wireless subscribers add and upgrade data plans and consume ever larger amounts of data.

<sup>67</sup> See Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2012-2017 (February 6, 2013).

in 2011, up to 342 MB per month.<sup>68</sup> In short, in 2012 customers consumed more data, and received faster and more reliable next generation services, for about what they paid the previous year.

Labor Department statistics agree that prices for mobile services continue to fall. In the *Sixteenth Report*, the Commission notes that the “Wireless Telephone Service CPI” *decreased* by almost 40 percent from 1997 to the end of 2011, even though the nation’s overall CPI *increased* by 40 percent over the same period; and this trend continued during 2011 with the Wireless CPI declining 3.2 percent in 2011, while the nation’s CPI increased by 3.6 percent.<sup>69</sup> For the most recent reported period ending in April 2013, the Wireless CPI once again decreased by 2.3 percent, while the national CPI increased by 1.1 percent.<sup>70</sup>

As noted, output also continues to grow rapidly, by every metric. The number of mobile wireless connections grew from 316 million connections at the end of 2011 to more than 325 million connections at the end of 2012, which is a new record.<sup>71</sup> The amount of data traffic in 2012 was up 69 percent compared to 2011.<sup>72</sup> Customers in the U.S., on average, use five times more minutes and more than twice as much data per connection as customers in the European Union.<sup>73</sup> The number of “Minutes of Use (MOU)” for 2012 hit 2.2999 trillion, yet another record.<sup>74</sup> The number of carrier provided SMS and MMS messages was only slightly down,

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<sup>68</sup> *Id.*

<sup>69</sup> *Sixteenth Report* ¶ 266, Table 37.

<sup>70</sup> See Bureau of Labor Statistics, *CPI Detailed Report, Data for April 2013*, available at <http://www.bls.gov/cpi/tables.htm>.

<sup>71</sup> CTIA May 2, 2013 Press Release.

<sup>72</sup> *Id.*

<sup>73</sup> Navigant Wireless Performance Report at 7.

<sup>74</sup> CTIA May 2, 2013 Press Release.

notwithstanding that there has been a substantial shift away from carrier-based SMS and MMS services to data-based services not captured by the metrics, such as Google Message, Apple's iMessage, Facebook Messaging, Skype, and similar applications. The number of "[a]ctive smartphones and wireless-enabled PDAs" was up 36 percent in 2012 compared to 2011.<sup>75</sup> The number of "[w]ireless-enabled tablets, laptops and modems" was up more than 10 percent in 2012 compared to 2011.<sup>76</sup> And, at year end 2012 "[t]otal prepaid/pay-as-you-go subscribers [were] 76.4 million (23.4 percent of subscribers)," a new record.<sup>77</sup>

#### **D. Consumer Behavior**

Consumer conduct further confirms that the wireless marketplace is effectively competitive. The Commission typically considers data on churn and on factors that can influence a consumer's decision to switch providers,<sup>78</sup> and all of that data demonstrate that consumers routinely vote with their feet and have the ability to choose the wireless option that best fits their needs.

Customer satisfaction is at record levels. As of May 21, 2013, the American Customer Satisfaction index for wireless services was at an all time high, and up 2.9 percent compared year-over-year.<sup>79</sup> Moreover, according to J.D. Power and Associates, "[o]verall, satisfaction is significantly higher among smartphone customers using 4G networks than among those using previous-generation networks" and consumer satisfaction among "full-service customers who

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<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

<sup>78</sup> *See, e.g., Sixteenth Report* ¶¶ 243-46.

<sup>79</sup> *See American Customer Satisfaction Index, Most Recent Data Release* (May 21, 2013), <http://www.theacsi.org/acsi-results/acsi-benchmarks-may>.

own a 4G-enabled device” is also “considerably higher than among those who own a previous-generation network technology device.”<sup>80</sup>

But customers face no significant obstacles if they want to change providers. According to a recent report by Strategy Analytics, monthly churn rates for post-paid services among wireless providers continue to range from about 1.3 percent to about 5 percent.<sup>81</sup> Even at the low end, a 1.3 percent churn rate means that nearly 16 percent of a provider’s customers are changing carriers each year. For a carrier like Verizon, that translates into more than 20 million customers each year. These statistics are an obvious real-world demonstration that “switching costs” for post-paid services are minimal, and that customers can and do take advantage of the competitive options available to them.<sup>82</sup> Moreover, churn rates for prepaid services are higher. For example, T-Mobile reports that although its postpaid churn rates for the first quarter of 2013 were about 1.9 percent, its churn rates for prepaid services were 7 percent.<sup>83</sup>

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<sup>80</sup> See J.D. Power & Assocs., *2013 U.S. Wireless Network Quality Performance Study - Vol. 1* (Mar. 7, 2013), <http://www.jdpower.com/content/press-release/VF9361y/2013-u-s-wireless-network-quality-performance-study--vol-1.htm>; J.D. Power & Assocs., *2013 U.S. Wireless Full-Service and Non-contract Purchase Experience Study – Volume 1 Results* (Feb. 25, 2013), <http://www.jdpower.com/content/study/l5YLkuL/2013-u-s-wireless-full-service-and-non-contract-purchase-experience-study-volume-1-results.htm>.

<sup>81</sup> See *Grading the top 10 U.S. carriers in the first quarter of 2013*, FierceWireless, (May 15, 2013), available at <http://www.fiercewireless.com/special-reports/grading-top-10-us-carriers-first-quarter-2013><http://www.fiercewireless.com/special-reports/grading-top-10-us-carriers-first-quarter-2013>.

<sup>82</sup> This should come as no surprise, because as the Commission has previously found, consumers have many sources of information about wireless services both from the providers themselves and from numerous third parties. Many providers, including AT&T, also offer trial periods that permit customers to terminate a new wireless agreement within a certain number of days, with no cost to the consumer.

<sup>83</sup> See T-Mobile USA 2013 First Quarter Results Press Release, T-Mobile, T-Mobile USA Reports First Quarter 2013 Results, available at <http://investor.t-mobile.com/phoenix.zhtml?c=177745&p=irol-newsArticle&ID=1816782&highlight=>.

## II. THE IMPORTANCE OF PRO-COMPETITIVE SPECTRUM POLICIES.

Although the wireless marketplace is effectively competitive today, the Commission must address the looming spectrum crisis if the U.S. is to remain the world mobile broadband leader. AT&T applauds the recent steps taken by Congress and by the Commission to make significant new spectrum available for mobile broadband services. The Commission should focus its energies on making sure that these auctions can occur expeditiously and are designed to permit the largest amount of spectrum possible to flow to its most highly-valued uses. Unfortunately, there has been a recent push by some parties to have the Commission deny certain mobile providers the spectrum they need to continue to compete effectively. These parties argue that AT&T and Verizon currently hold large amounts of spectrum, and that the Commission should limit their ability to acquire additional spectrum, both in auctions and in secondary market transactions. These proposals could only harm consumers and reduce the overall amount of spectrum available to support broadband services.

Foremost, recent economist submissions confirm that calls to limit AT&T's and Verizon's participation in the upcoming 600 MHz auction would be affirmatively harmful.<sup>84</sup> The amount of spectrum made available in the upcoming spectrum auction is tied directly to the amount of revenue that can be generated in the forward auction. Limiting AT&T's and Verizon's ability to bid for spectrum will only reduce the overall amount of revenue that can be

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<sup>84</sup> See Prof. Michael L. Katz, Philip A. Haile, Dr. Mark A. Israel, and Dr. Andres V. Lerner, "Comments on the Submission of the U.S. Department of Justice Regarding Auction Participation Restrictions," *Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269 (June 13, 2013) ("Economist Response to DOJ") and Prof. Michael L. Katz, Philip A. Haile, Dr. Mark A. Israel, and Dr. Andres V. Lerner, "Comments on Appropriate Spectrum Aggregation Policy with Application to the Upcoming 600 MHz Auction," *Policies Regarding Mobile Spectrum Holdings*, WT Docket No. 12-269 (filed June 13, 2013) ("Auction Supplemental Reply") (attached to Letter from David L. Lawson (AT&T) to Marlene H. Dortch (FCC), GN Docket No. 12-268, WT Docket No. 12-269 (June 13, 2013)).

realized in the forward auction – which, in turn, will reduce the amount of spectrum ultimately made available for wireless broadband services.<sup>85</sup> Indeed, limiting AT&T’s and Verizon’s participation in the auction could even result in a total failure of the auction – a disastrous outcome that would preclude the industry from gaining access to any new spectrum and eliminating funding for critical new public safety infrastructure.<sup>86</sup>

In reality, these proposals are thinly disguised attempts to help two individual competitors – Sprint and T-Mobile. The notion that Sprint and T-Mobile have a special need for low-frequency spectrum and will be foreclosed from competing effectively without it lacks “any grounding in facts or economic logic.”<sup>87</sup> The argument that it costs more to deploy high-frequency spectrum than low-frequency spectrum is specious, because deployment costs are only part of the costs of building and operating a network. The total cost of providing service, which is the relevant consideration, includes both the cost of network build-out and spectrum.<sup>88</sup> Basic economic principles teach that the marketplace value of low-frequency and high-frequency spectrum rights will tend to adjust to ensure that the “full cost of entry or expansion” is equalized.<sup>89</sup> This “equalization of total costs renders the possibility of foreclosure through hoarding low-frequency spectrum alone remote at best.”<sup>90</sup> In all events, all parties agree that the propagation differences between high-and low-frequency spectrum manifest themselves mostly in rural areas, where no one could credibly assert a risk of foreclosure. In contrast, in more densely

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<sup>85</sup> See Economist Response to DOJ, ¶¶ 5-12.

<sup>86</sup> See Economist Response to DOJ ¶ 12; Auction Supplemental Reply ¶ 5.

<sup>87</sup> Economist Response to DOJ ¶ 6.

<sup>88</sup> *Id.* ¶ 7.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

populated areas, network build-out is dictated by network capacity requirements, not coverage, so there is no significant cost difference in building out either type of spectrum.<sup>91</sup>

Finally, there is no basis for new spectrum-related policies designed to “protect” competition. The only rationale for restrictions on spectrum holdings is to guard against the possibility of a market foreclosure strategy, but the speculative concern that AT&T and Verizon might seek to “foreclose” rivals by bidding for spectrum they do not need is “belied by the facts.”<sup>92</sup> Current marketplace realities make any foreclosure strategy implausible, especially against Sprint or T-Mobile, both of which already hold large amounts of spectrum.<sup>93</sup> The marketplace is already effectively competitive, and the Commission’s existing spectrum policies – which are built on a flexible spectrum screen that acts as a safe harbor coupled with case-by-case review of requests to exceed the screen – are more than adequate to protect and promote competition. The Commission should focus on the only real threat to the United States’ wireless leadership – the looming spectrum crisis – and not far-fetched claims that the wireless marketplace is in any serious or imminent danger of foreclosure.

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<sup>91</sup> *Id.* ¶ 44. Of course, for the reasons stated above, even if network deployment costs for high frequency spectrum were greater in urban area, that cost difference would only drive down the price of high frequency spectrum relative to low frequency spectrum, resulting in the equalization of total costs.

<sup>92</sup> Economist Response to DOJ ¶ 4.

<sup>93</sup> *Id.* ¶¶ 4-5.



## CONCLUSION

For the foregoing reasons, the Commission should find that the wireless mobile marketplace is characterized by effective competition.

Respectfully submitted,

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